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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,299	05/24/2001	Toyonori Sasaki	103007.01	9529

25944 7590 03/07/2003

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EXAMINER
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NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 03/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/863,299

Applicant(s)

SASAKI, TOYONORI

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,46-54,56-68,70 and 71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,46-50,62-68 and 71 is/are allowed.
- 6) ☒ Claim(s) 51-53 and 56-59 is/are rejected.
- 7) ☒ Claim(s) 54,60,61 and 70 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/280,056.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.                      6) ☐ Other:

## **DETAILED ACTION**

The Amendment filed on February 21, 2003 has been acknowledged.

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2003 has been entered.

### ***Withdrawal of Allowability***

2. The indicated allowability of claims 51, 52, 58, and 59 are withdrawn in view of the reference(s) to Abe et al. (US 5,903,294) and Takagi (US 5,877,294). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 70 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The first and second chambers lack antecedent basis.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 51-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Abe et al. (US 5,903,294).

Abe et al. discloses the all the limitations of the invention:

- an ink cartridge (Fig. 1a) for holding ink supplied to a recording head (1), comprising:
  - a case (case of ink cartridge, Fig. 1a) having a first surface (left surface of cartridge, Fig. 1a) on the outside of the case and a second surface (right surface of cartridge, Fig. 1a) on the outside of the case in mutual opposition (Fig. 1a), the second surface being open (without left wall);
  - a partitioning wall (13) for separating the interior of the case into an ink chamber (6, 9) for holding ink and an atmosphere connection chamber (15), wherein the ink chamber and the atmosphere connection chamber are open on the second surface side (Fig. 1a), one end of the atmosphere connection chamber communicates to the ink chamber on the first surface side (left side of cartridge), and the other end of the atmosphere connection chamber communicates to the outside of the case (via 8);
  - a cover (left wall of cartridge) for covering the second surface, the cover having an ink supply hole (7) formed therein, which supplies ink to the recording head and is connected to the ink chamber (Fig. 1a);
  - the cover covers the open surfaces of the ink chamber and the atmosphere connection path (Fig. 1a), and has a connecting hole (8) for communicating with the atmosphere connection path;
- an ink cartridge (Fig. 1a) for holding ink supplied to a recording head (1), comprising:

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- a case (case of 15 and 6, Fig. 1a) having a first surface on the outside of the case (surface supporting 4) and a second surface (left surface of ink cartridge) on the outside of the case in opposition, the first and second surfaces are open (without left wall of ink cartridge and 4);

- a partitioning wall (13) for separating the interior of the case into an ink chamber (6) for holding ink and an atmosphere connection path (15) communicating to the outside of the case (via 8), wherein the ink chamber is open on the first surface and the second surface sides (without left wall and 4, Fig. 1a);

- a first cover (4) for covering the first surface of the case so that a path is formed for communicating between the ink chamber and the atmosphere connection path (Fig. 1a);

- a second cover (left wall of cartridge) for covering the second surface of the case;

- an ink supply hole (7) joined to the recording head, formed in the second cover so as to communicate with the ink chamber (Fig. 1a).

Claims 56-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Takagi (US 5,877,794).

Takagi discloses the all the limitations of the invention:

- an ink cartridge (Figs. 2, 3) for holding ink supplied to a recording head (1), comprising:

- a cartridge case (case of ink cartridge) having a first side wall (right side wall of cartridge) and a second side wall (left side wall of cartridge) opposed to the first side wall (Fig. 3);

- a first partitioning wall (42) positioned substantially parallel to the first side wall of the case so as to separate the interior of the cartridge case into a first chamber (chamber in 40 left of 50) and a second chamber (chambers in 40 left of first chamber) for respectively accommodating ink;

- a second partitioning wall (33) positioned substantially parallel to the first side wall of the case for separating the interior of the case into the first chamber and an atmosphere connection path (50) for communicating with an atmosphere outside the case (via 37), wherein one end of the second chamber communicates with one end of the first chamber (Fig. 4), one end of the atmosphere connection path communicates with the other end of the first chamber (Figs. 3, 4) and the other end of the atmosphere connection path is open to the outside of the case (via 37);

- the atmosphere connection path is formed between the first side wall and the second partitioning wall (50 is between right side wall and 33), and the second chamber is formed between the second side wall and the first partitioning wall (second chamber is between left side wall and 42);

- an ink supply hole (41) for supplying ink to the recording head located near one end of the second chamber (bottom end of second chamber), and the ink in the first chamber passes through the second chamber (Fig. 4) and is supplied to the recording head from the ink supply hole (Fig. 4);

- the other end of the first chamber is open (without 35), the open part is covered by a first cover (35), the one end of the second chamber is open (without bottom wall, Fig. 3), the open part is covered by a second cover (bottom wall, Fig. 3), and the ink supply hole is formed in the second cover (Fig. 3).

### ***Allowable Subject Matter***

5. Claims 54, 60, 61, and 70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1, 46-50, 62-68, and 71 are allowed.

### ***Reasons For Allowance***

7. The combination as claimed wherein an ink cartridge including the first chamber and the second chamber communicating with each other near the second surface inside the case such that the ink is filled in the first chamber through the second chamber from the ink filling hole (claims 1, 62) or wherein one of the first chamber and the second chamber is covered by the first cover and the other of the chambers is covered by the second cover (claims 54, 71) or a third partitioning wall that is joined to the lower ends of the first partitioning wall and the second partitioning wall while



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extending in a direction substantially perpendicular to the first side wall (claim 60) or a path for connecting the first chamber and the atmosphere connection chamber, formed in the upper case surface (claim 66) is not disclosed, suggested, or made obvious by the prior art of record.

### ***Response to Arguments***

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

March 6, 2003